

AMENDMENTS TO THE SPECIFICATIONS

The paragraph on page 2, starting in line 14 has been replaced with the following amended paragraph:

A1
One method of constructing a full-color photosensitive chip 10 is to first create a wafer having a relatively large number, such as one hundred or more, semiconductor structures, each structure corresponding to one chip 10. Filter layers 12 may then be applied to the structures on the wafer. The filter layers 12 may be applied as an even layer of translucent liquid to the entire wafer. This layer can then be etched away with, for example, a laser except in those areas on the chip structure where the filter is desired to be placed. Lithography can be used, where a photosensitive polymer containing a colorant is exposed to ultraviolet radiation through a mask and then patterned in a developer solution. For full-color chips, multiple layers of translucent filter material are applied to the wafer by spin coating, and then etched away as needed, to yield the three primary-color-filtered linear arrays of photosensors 14, as known to those of ordinary skill in the art. Only after the filter layers 12 are applied as desired is the wafer "diced," or sawed into individual chips.

The paragraph on page 3, starting in line 4 has been replaced with the following amended paragraph:

A2
In the foregoing method of fabricating a full-color photosensitive chip 10, a problem may arise when applying successive translucent filter layers 12. In particular, the process of applying a filter coat to the chip may cause the coat to be thicker on some photosensors than on others. Different thicknesses of the filter coat result in different intensities of light passing through the filter material to a particular photosensor. Such variations may result in

A2
diminished reproduction quality. For photosensors of a particular type on a single chip, it is desirable that the filter coat be of uniform thickness. In addition, when applying a filter coat, it is desirable to leave a smooth surface on the chip on which to apply the next filter coat. If the surface is not smooth, color reproduction quality can suffer.

The paragraph on page 3, starting in line 15 has been replaced with the following amended paragraph:

A3
One method of smoothing a first filter coat before applying a second filter coat involves grinding and/or polishing. Specifically, after the first filter coat is applied, another layer, such as a polyimide layer, is applied on top. Next, the polyimide layer is ground and/or polished down to the level of the first filter coat. Finally, the second filter coat is applied on the ground surface. One drawback of this technique, however, is that grinding and/or polishing the polyimide layer can be a time-consuming and inefficient process to smooth a surface of a photosensitive chip, resulting in waste and increased 20 production time.

The paragraph on page 7, starting in line 18 has been replaced with the following amended paragraph:

A4
Referring to Fig. 2A, a photosensitive chip, such as the chip 10 of Fig. 1, can be fabricated by providing a substrate 20. A number of photosensors 21-23 can be disposed within the substrate 20. Some surface irregularities are also shown as the surface topography 24. With a purpose of smoothing the surface irregularities that form the surface topography 24, a clear base layer 25 may be disposed on the top surface 201 of the substrate. In other embodiments, the application of this clear base layer 25 may be omitted. As used herein, the term "smoothing" is intended to include reducing, eliminating, or preventing the formulation of relatively sharp profiles of irregularities or other formed topographical structures present in

one or more layers of the chip, so as to promote or enhance the transfer or flow of a fluid material, such as the filter material, across the surface of the chips without creating significant layer thickness irregularities as measured across the surface of the chip.

